



IFW 1769A
DOCKET NO.: D0617.70002US10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Robert Charles Ladner et al.
Serial No.: 09/893,878
Confirmation No.: 1764
Filed: June 29, 2001
For: DIRECTED EVOLUTION OF NOVEL BINDING PROTEINS
Examiner: Jeffrey S. Lundgren
Art Unit: 1639

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to MAIL STOP Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 31st day of March, 2006.


Melissa L.B. Lyons

MAIL STOP Amendment
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith are the following documents:

- **Information Disclosure Statement**
- **PTO Form 1449 with cited references**
- **Return Receipt Postcard**

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 646-8000, Boston, Massachusetts.

A check in the amount of \$180.00 is enclosed to cover the information disclosure statement fee. If the fee is insufficient, the balance may be charged to Deposit Account 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,
Robert Charles Ladner et al., Applicant

By: 

MaryDilys S. Anderson, Ph.D., Reg. No.: 52,560
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

Docket No.: D0617.70002US10

Date: March 31, 2006

xNDDx



DOCKET NO.: D0617.70002US10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Robert Charles Ladner et al.
Serial No.: 09/893,878
Confirmation No.: 1764
Filed: June 29, 2001
For: DIRECTED EVOLUTION OF NOVEL BINDING PROTEINS
Examiner: Jeffrey S. Lundgren
Art Unit: 1639

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 31st day of March, 2006.


Melissa L.B. Lyons

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**STATEMENT FILED PURSUANT TO THE DUTY OF
DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98**

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. §1.97

This Information Disclosure Statement has been filed more than three months after the filing date of this application and after the mailing date of the first Office action, but before the mailing date of any final action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in this application.

The fee of \$180.00 as set forth in 37 C.F.R. §1.17(p) is enclosed.

04/06/2006 WASFAW1 00000081 09893878

01 FC:1806

180.00 0P

987625.1

PART II: Information Cited

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicant hereby makes the following additional information of record in the above-identified application.

The Applicant would like to bring to the Examiner's attention the following co-pending application that may contain subject matter related to this application:

<u>Docket No.</u>	<u>Serial No.</u>	<u>Filing Date</u>	<u>Inventor(s)</u>
D0617.70002US14	10/207,797*	31 July 2002	Ladner et al.

*a copy of this reference is not provided herewith but will be provided by Applicant if the Examiner does not have access to a copy and/or requests a copy be submitted.

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

Conf. No.: 1764

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,

By: MaryDilys S. Anderson
MaryDilys S. Anderson, Ph.D.
Reg. No. 52,560
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

Docket No.: D0617.70002US10

Date: March 31, 2006

xNDDx

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10	
				FILING DATE:	June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT:	Ladner et al.	
				GROUP ART UNIT:	1639	EXAMINER: Jeffrey S. Lundgren
Sheet	1	of	21			

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
*	A1	4,304,863	O P E	Collins et al.	12-08-1981
*	A2	4,332,897	P	Nakano et al.	06-01-1982
*	A3	4,338,397	APR 05 2006	Gilbert et al.	07-06-1982
*	A4	4,348,477	PTM	Nakano et al.	09-07-1982
*	A5	4,348,478	TRADEMARK	Nakano et al.	09-07-1982
*	A6	4,411,994		Gilbert et al.	10-25-1983
*	A7	4,508,826		Foor et al.	04-02-1985
*	A8	4,593,002		Dulbecco	06-03-1986
*	A9	4,595,658		Zinder et al.	07-17-1986
*	A10	4,595,674		Tschesche et al.	06-17-1986
*	A11	4,603,112		Paoletti et al.	07-29-1986
*	A12	4,642,334		Moore et al.	02-10-1987
*	A13	4,683,202		Mullis et al.	07-28-1987
*	A14	4,703,004		Hopp et al.	10-27-1987
*	A15	4,704,692		Ladner	11-03-1987
*	A16	4,757,013		Inouye et al.	07-12-1988
*	A17	4,769,326		Rutter	09-06-1988
*	A18	4,769,327		Stephens et al.	09-06-1988
*	A19	4,774,180		Toth et al.	09-27-1988
*	A20	4,797,363		Teodorescu et al.	01-10-1989
*	A21	4,829,052		Glover et al.	05-09-1989
*	A22	4,894,436		Auerswald et al.	01-16-1990
*	A23	4,908,773		Patoliano et al.	03-13-1990
*	A24	5,010,175		Rutter et al.	04-23-1991
	A25	4,359,535		Pieczenik	11-16-1982
	A26	4,528,266		Pieczenik	07-09-1985
	A27	4,786,719		Kudo et al.	11-22-1988
	A28	5,101,024		Kudo et al.	03-31-1992
	A29	5,223,409		Ladner et al.	06-29-1993
	A30	5,225,539		Winter	07-06-1993
	A31	5,403,484		Ladner et al.	04-04-1995
	A32	5,432,018		Dower et al.	07-11-1995

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	2	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

	A33	5,432,155		Olivera et al.	07-11-1995
	A34	5,498,538		Kay et al.	03-12-1996
	A35	5,571,698		Ladner et al.	11-05-1996
	A36	5,616,463		Fornace et al.	04-01-1997
	A37	5,723,286		Dower et al.	03-03-1998
	A38	5,789,538		Rebar et al.	08-04-1998
	A39	5,837,500		Ladner et al.	11-17-1998
	A40	5,866,363		Pieczenik	02-02-1999
	A41	5,891,640		DeLeys	04-06-1999
	A42	5,955,582		Newman et al.	09-21-1999
	A43	5,969,108		McCafferty et al.	10-19-1999
	A44	6,291,158	B1	Winter et al.	09-18-2001
	A45	6,979,538		Ladner et al.	12-27-2005
	A46	2002-0150881	A1	Ladner et al.	10-17-2002
	A47	2003-0113717	A1	Ladner et al.	06-19-2003
	A48	2003-0219886	A1	Ladner et al.	11-27-2003
	A49	2004-0005539	A1	Ladner et al.	01-08-2004
	A50	2004-0023205	A1	Ladner et al.	02-05-2004

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/Country	Number	Kind Code			
*	B1	EP	0 285 123	A2	Suomen Sokeri Oy	10-05-1988	
*	B2	EP	0 286 239	A1	New England Biolabs, Inc.	10-12-1988	
*	B3	EP	0 297 362	A2	Bayer AG	01-04-1989	
*	B4	EP	0 339 942	A2	Novo-Nordisk A/S	11-02-1989	
*	B5	EP	0 341 444	A2	The General Hospital Corporation	11-15-1989	
*	B6	GB	2 188 322	A	Bayer Aktiengesellschaft	09-30-1987	
*	B7	GB	2 188 933	A	Bayer Aktiengesellschaft	10-14-1987	
*	B8	GB	2 208 511	A	Bayer Aktiengesellschaft	05-04-1989	
*	B9	WO	87/01374	A2	Pieczenik	03-12-1987	
*	B10	WO	88/01649	A1	Genex Corporation	03-10-1988	
*	B11	WO	88/06601	A1	Genex Corporation	09-07-1988	
*	B12	WO	88/06630	A1	Genex Corporation	09-07-1988	
*	B13	WO	89/01968	A1	Novo Industri A/S	03-09-1989	
*	B14	WO	90/02809	A1	Protein Engineering Corporation	03-22-1990	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	3	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	B15	WO	91/17271	A1	Affymax Technologies N.V.	11-14-1991	
*	B16	WO	91/18980	A1	Cetus Corporation	12-12-1991	
*	B17	WO	91/19818	A1	Affymax Technologies N.V.	12-26-1991	
*	B18	WO	92/06176	A1	Ixsys Inc.	04-16-1992	
*	B19	WO	92/06204	A1	Ixsys Inc.	04-16-1992	
*	B20	WO	92/11272	A1	Ixsys Inc.	07-09-1992	
*	B21	WO	94/18220	A1	The Scripps Research Institute	08-18-1994	
*	B22	WO	95/19431	A1	The Scripps Research Institute	07-20-1995	
*	B23	WO	96/06166	A1	Medical Research Council	02-29-1996	
	B24	EP	0 184 187	A2	Teijin Limited	06-11-1986	
	B25	EP	0 274 394	A2	International Genetic Engineering, Inc.	07-13-1988	
	B26	EP	1 279 731	A1	Dyax Corp.	03-01-1991	
	B27	GB	2 183 661	A	Marc Ballivet	06-10-1987	
	B28	WO	89/02461	A1	Schering Aktiengesellschaft	03-23-1989	Abstract
	B29	WO	92/01047	A1	Cambridge Antibody Technology Limited	01-23-1992	
	B30	WO	92/15605	A2	Protein Engineering Corporation	09-17-1992	
	B31	WO	92/15677	A1	Protein Engineering Corporation	09-17-1992	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
*	C1	ABARZUA et al., Enzymatic techniques for the isolation of random single-base substitutions in vitro at high frequency. Proc Natl Acad Sci U S A. 1984 Apr;81(7):2030-4.	
*	C2	ADAMSON et al., Inhibition of human leukocyte elastase (HLE) by disulfide-cyclized analogs of alpha-antitrypsin (alphaAT). in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 859-60.	
*	C3	AGTERBERG et al., Use of outer membrane protein PhoE as a carrier for the transport of a foreign antigenic determinant to the cell surface of Escherichia coli K-12. Gene. 1987;59(1):145-50.	
*	C4	ALTMAN et al., Intracellular expression of BPTI fusion proteins and single column cleavage/affinity purification by chymotrypsin. Protein Eng. 1991;4(5):593-600.	
*	C5	ARAKI et al., Four disulfide bonds' allocation of Na+, K(+)-ATPase inhibitor (SPA1). Biochem Biophys Res Commun. 1990 Oct 15;172(1):42-6.	
*	C6	ARGOS et al., Analysis of sequence-similar pentapeptides in unrelated protein tertiary structures. Strategies for protein folding and a guide for site-directed mutagenesis. J Mol Biol. 1987 Sep 20;197(2):331-48.	
*	C7	AUSUBEL et al., eds. Current Protocols in Molecular Biology. John Wiley and Sons, publisher. New York, 1987; p.8.0.1-8.3.6.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	4	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	C8	BARBAS et al., Assembly of combinatorial antibody libraries on phage surfaces: the gene III site. Proc Natl Acad Sci U S A. 1991 Sep 15;88(18):7978-82.	
*	C9	BASS et al., Hormone phage: an enrichment method for variant proteins with altered binding properties. Proteins. 1990;8(4):309-14.	
*	C10	BECKER et al., Synthesis and characterization of mu-conotoxin IIIa. Eur J Biochem. 1989 Oct 20;185(1):79-84.	
*	C11	BECKWITH et al., Genetic analysis of protein export in Escherichia coli. Methods Enzymol. 1983;97:3-11.	
*	C12	BEDOUELLE et al., [Expression, export and one-step purification of proteins by fusion to the MalE protein of E. coli] C R Acad Sci III. 1987;305(17):623-6. French.	
*	C13	BEDOUELLE et al., Production in Escherichia coli and one-step purification of bifunctional hybrid proteins which bind maltose. Export of the Klenow polymerase into the periplasmic space. Eur J Biochem. 1988 Feb 1;171(3):541-9.	
*	C14	BENSON et al., Infragenic regions required for LamB export. Proc Natl Acad Sci U S A. 1984 Jun;81(12):3830-4.	
*	C15	BENSON et al., In vivo selection and characterization of internal deletions in the lamB::lacZ gene fusion. Gene. 1987;52(2-3):165-73.	
*	C16	BENSON et al., Signal sequence mutations that alter coupling of secretion and translation of an Escherichia coli outer membrane protein. J Bacteriol. 1987 Oct;169(10):4686-91.	
*	C17	BENZ et al., Structure and function of porins from gram-negative bacteria. Annu Rev Microbiol. 1988;42:359-93.	
*	C18	BERG et al., Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc Natl Acad Sci U S A. 1988 Jan;85(1):99-102.	
*	C19	BHATNAGAR et al., Synthesis and antigenic activity of E. coli ST and its analogues. Dev Biol Stand. 1986;63:79-87.	
*	C20	BIENSTOCK et al., Conformation of highly potent bicyclic GnRH antagonist by combined molecular dynamics and two-dimensional NMR analyses. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p262-4.	
*	C21	BOEKE et al., Processing of filamentous phage pre-coat protein. Effect of sequence variations near the signal peptidase cleavage site. J Mol Biol. 1980 Dec 5;144(2):103-16.	
*	C22	BOLIN et al., Expression of the temperature-inducible outer membrane proteins of yersinia. Infect Immun. 1985 Apr;48(1):234-40.	
*	C23	BOTSTEIN et al., Strategies and applications of in vitro mutagenesis. Science. 1985 Sep 20;239(4719):1193-201.	
*	C24	BOUGES-BOCQUET et al., In vitro genetic constructions devised to express given antigenic determinants at the surface of gram-negative bacteria. in Modern Approaches to Vaccines: Molecular and Chemical Basis of Virus. Robert M. Chanock, ed. 1984; p.225-33. (Previously listed in related cases as: Unite de Programmation Moleculaire et Toxicologie Genetique CNRS LA 271, INSERM U. 163, Institut Pasteur, 75015 Paris, France.)	
*	C25	BOUGES-BOCQUET et al., Linker mutagenesis in the gene of an outer membrane protein of Escherichia coli, lamB. J Cell Biochem. 1984;24(3):217-28.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	5	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	C26	BOULAIN et al., Mutagenesis by random linker insertion into the lamB gene of Escherichia coli K12. Mol Gen Genet. 1986 Nov;205(2):339-48.	
*	C27	BREITLING et al., A surface expression vector for antibody screening. Gene. 1991 Aug 15;104(2):147-53.	
*	C28	BRINKMANN et al., Design of an aprotinin variant with inhibitory activity against chymotrypsin and cathepsin G by recombinant DNA technology. Biol Chem Hoppe Seyler. 1990 May;371 Suppl:43-52.	
*	C29	BURTON et al., A large array of human monoclonal antibodies to type 1 human immunodeficiency virus from combinatorial libraries of asymptomatic seropositive individuals. Proc Natl Acad Sci U S A. 1991 Nov 15;88(22):10134-7.	
*	C30	BUTLER et al., Disulfide-bonded outer membrane proteins in the genus Legionella. Infect Immun. 1985 Apr;48(1):14-8.	
*	C31	CHANG et al., Expression of antibody Fab domains on bacteriophage surfaces. Potential use for antibody selection. J Immunol. 1991 Nov 15;147(10):3610-4.	
*	C32	CHARBIT et al., Presentation of two epitopes of the preS2 region of hepatitis B virus on live recombinant bacteria. J Immunol. 1987 Sep 1;139(5):1658-64.	
*	C33	CHARBIT et al., Probing the topology of a bacterial membrane protein by genetic insertion of a foreign epitope; expression at the cell surface. EMBO J. 1986 Nov;5(11):3029-37.	
*	C34	CHARBIT et al., [A genetic method for exposing a given epitope at the surface of the bacterium Escherichia coli. Perspectives] C R Acad Sci III. 1986;302(17):617-20. French.	
*	C35	CHARBIT et al., Versatility of a vector for expressing foreign polypeptides at the surface of gram-negative bacteria. Gene. 1988 Oct 15;70(1):181-9.	
*	C36	CHARBIT et al., Expression of a poliovirus neutralization epitope at the surface of recombinant bacteria: first immunization results. Ann Inst Pasteur Microbiol. 1988 Jan-Feb;139(1):45-58.	
*	C37	CHARBIT et al., Immunogenicity and antigenicity of conserved peptides from the envelope of HIV-1 expressed at the surface of recombinant bacteria. AIDS. 1990 Jun;4(6):545-51.	
*	C38	CHAVRIER et al., Characterization of a mouse multigene family that encodes zinc finger structures. Mol Cell Biol. 1988 Mar;8(3):1319-26.	
*	C39	CHOO et al., Designing DNA-binding proteins on the surface of filamentous phage. Curr Opinion Biotechnol. 1995;6(4):431-7.	
*	C40	CHOWDHURY et al., A multigene family encoding several "finger" structures is present and differentially active in mammalian genomes. Cell. 1987 Mar 13;48(5):771-8.	
*	C41	CLACKSON et al., Making antibody fragments using phage display libraries. Nature. 1991 Aug 15;352(6336):624-8.	
*	C42	CLEMENTS et al., Construction of a nontoxic fusion peptide for immunization against Escherichia coli strains that produce heat-labile and heat-stable enterotoxins. Infect Immun. 1990 May;58(5):1159-66.	
*	C43	CLORE et al., Comparison of the solution and X-ray structures of barley serine proteinase inhibitor 2. Protein Eng. 1987 Aug-Sep;1(4):313-8.	
*	C44	CLORE et al., The determination of the three-dimensional structure of barley serine proteinase inhibitor 2 by nuclear magnetic resonance, distance geometry and restrained molecular dynamics. Protein Eng. 1987 Aug-Sep;1(4):305-11.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	6	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	C45	CLUNE et al., Affinity engineering of maltoporin: variants with enhanced affinity for particular ligands. <i>Biochem Biophys Res Commun.</i> 1984 May 31;121(1):34-40.	
*	C46	COLLINS et al., Human leukocyte elastase inhibitors: designed variants of human pancreatic secretory trypsin inhibitor (hPSTI). <i>Biol Chem Hoppe Seyler.</i> 1990 May;371 Suppl:29-36.	
*	C47	COY et al., Cyclic bombesin/GRP analogs which retain either agonist or antagonist activity. in Smith et al., eds. <i>Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium.</i> 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 40-1.	
*	C48	CREIGHTON et al., Biosynthesis, processing, and evolution of bovine pancreatic trypsin inhibitor. <i>Cold Spring Harb Symp Quant Biol.</i> 1987;52:511-9.	
*	C49	CREIGHTON et al., Disulphide bonds and protein stability. <i>Bioessays.</i> 1988 Feb-Mar;8(2):57-63.	
*	C50	CRUZ et al., Conus geographus toxins that discriminate between neuronal and muscle sodium channels. <i>J Biol Chem.</i> 1985 Aug 5;260(16):9280-8.	
*	C51	CRUZ et al., mu-conotoxin GIIIA, a peptide ligand for muscle sodium channels: chemical synthesis, radiolabeling, and receptor characterization. <i>Biochemistry.</i> 1989 Apr 18;28(8):3437-42.	
*	C52	CULL et al., Screening for receptor ligands using large libraries of peptides linked to the C terminus of the lac repressor. <i>Proc Natl Acad Sci U S A.</i> 1992 Mar 1;89(5):1865-9.	
*	C53	CWIRLA et al., Peptides on phage: a vast library of peptides for identifying ligands. <i>Proc Natl Acad Sci U S A.</i> 1990 Aug;87(16):6378-82.	
*	C54	DALLAS et al., The heat-stable toxin I gene from Escherichia coli 18D. <i>J Bacteriol.</i> 1990 Sep;172(9):5490-3.	
*	C55	DE LA CRUZ et al., Immunogenicity and epitope mapping of foreign sequences via genetically engineered filamentous phage. <i>J Biol Chem.</i> 1988 Mar 25;263(9):4318-22.	
*	C56	DERBYSHIRE et al., A simple and efficient procedure for saturation mutagenesis using mixed oligodeoxynucleotides. <i>Gene.</i> 1986;46(2-3):145-52.	
*	C57	DEVLIN et al., Random peptide libraries: a source of specific protein binding molecules. <i>Science.</i> 1990 Jul 27;249(4967):404-6.	
*	C58	DONOVAN et al., Genes encoding spore coat polypeptides from <i>Bacillus subtilis</i> . <i>J Mol Biol.</i> 1987 Jul 5;196(1):1-10.	
*	C59	DOUGAN et al., Molecular analysis of the virulence determinants of enterotoxigenic <i>Escherichia coli</i> isolated from domestic animals: applications for vaccine development. <i>Vet Microbiol.</i> 1985 Apr;10(3):241-57.	
*	C60	DUBE et al., Mutants generated by the insertion of random oligonucleotides into the active site of the beta-lactamase gene. <i>Biochemistry.</i> 1989 Jul 11;28(14):5703-7.	
*	C61	DUFTON et al., Identification of a locality in snake venom alpha-neurotoxins with a significant compositional similarity to marine snail alpha-conotoxins: implications for evolution and structure/activity. <i>J Mol Evol.</i> 1989 Oct;29(4):355-66.	
*	C62	DWARAKANATH et al., Cloning and hyperexpression of a gene encoding the heat-stable toxin of <i>Escherichia coli</i> . <i>Gene.</i> 1989 Sep 30;81(2):219-26.	
*	C63	ELLEMAN et al., Pilins of <i>Bacteroides nodosus</i> : molecular basis of serotypic variation and relationships to other bacterial pilins. <i>Microbiol Rev.</i> 1988 Jun;52(2):233-47.	
*	C64	EVANS et al., Zinc fingers: gilt by association. <i>Cell.</i> 1988 Jan 15;52(1):1-3.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	7	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	C65	FAVEL et al., Active site chemical mutagenesis of Ecballium elaterium trypsin inhibitor II: new microproteins inhibiting elastase and chymotrypsin. Biochem Biophys Res Commun. 1989 Jul 14;162(1):79-82.	
*	C66	FELICI et al., Selection of antibody ligands from a large library of oligopeptides expressed on a multivalent exposition vector. J Mol Biol. 1991 Nov 20;222(2):301-10.	
*	C67	FERENCI et al., Temperature-sensitive binding of alpha-glucans by Bacillus stearothermophilus. J Bacteriol. 1986 Apr;166(1):95-9.	
*	C68	FERENCI et al., Isolation, by affinity chromatography, of mutant escherichia coli cells with novel regulation of lamB expression. J Bacteriol. 1983 May;154(2):984-7.	
*	C69	FERENCI et al., Directed evolution of the lambda receptor of Escherichia coli through affinity chromatographic selection. J Mol Biol. 1982 Sep 25;160(3):431-44.	
*	C70	FERENCI et al., Genetic manipulation of bacterial surfaces through affinity-chromatographic selection. Trends Biol Sci. 1984 Feb;9(2):44-8.	
*	C71	FERENCI et al., Affinity-chromatographic studies based on the binding-specificity of the lambda receptor of Escherichia coli. Ann Microbiol (Paris). 1982 Jan;133A(1):167-9.	
*	C72	FRANKEL et al., Metal-dependent folding of a single zinc finger from transcription factor IIIA. Proc Natl Acad Sci U S A. 1987 Jul;84(14):4841-5.	
*	C73	FRANKEL et al., Fingering too many proteins. Cell. 1988 Jun 3;53(5):675.	
*	C74	FREIMUTH et al., Introduction of guest peptides into Escherichia coli alkaline phosphatase. Excision and purification of a dynorphin analogue from an active chimeric protein. J Biol Chem. 1990 Jan 15;265(2):896-901.	
*	C75	FREUDL et al., A lower size limit exists for export of fragments of an outer membrane protein (OmpA) of Escherichia coli K-12. J Mol Biol. 1989 Feb 20;205(4):771-5.	
*	C76	FREUDL et al., Insertion of peptides into cell-surface-exposed areas of the Escherichia coli OmpA protein does not interfere with export and membrane assembly. Gene. 1989 Oct 30;82(2):229-36.	
*	C77	GALLUSSER et al., Initial steps in protein membrane insertion. Bacteriophage M13 procoat protein binds to the membrane surface by electrostatic interaction. EMBO J. 1990 Sep;9(9):2723-9.	
*	C78	GARIEPY et al., A common antigenic determinant found in two functionally unrelated toxins. J Exp Med. 1984 Oct 1;160(4):1253-8.	
*	C79	GARIEPY et al., Structure of the toxic domain of the Escherichia coli heat-stable enterotoxin ST I. Biochemistry. 1986 Dec 2;25(24):7854-66.	
*	C80	GARIEPY et al., Importance of disulfide bridges in the structure and activity of Escherichia coli enterotoxin ST1b. Proc Natl Acad Sci U S A. 1987 Dec;84(24):8907-11.	
*	C81	GARRARD et al., Fab assembly and enrichment in a monovalent phage display system. Biotechnology (N Y). 1991 Dec;9(12):1373-7.	
*	C82	GAUSS et al., Zinc (II) and the single-stranded DNA binding protein of bacteriophage T4. Proc Natl Acad Sci U S A. 1987 Dec;84(23):8515-9.	
*	C83	GERDAY et al., Isolation and characterization of the heat stable enterotoxin from a pathogenic bovine strain of Escherichia coli. Vet Microbiol. 1984 Aug;9(4):399-414.	
*	C84	GETZOFF et al., Understanding the structure and antigenicity of gonococcal pili. Rev Infect Dis. 1988 Jul-Aug;10 Suppl 2:S296-9.	
*	C85	GIBSON et al., A model for the tertiary structure of the 28 residue DNA-binding motif ('zinc finger') common to many eukaryotic transcriptional regulatory proteins. Protein Eng. 1988	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	8	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

		Sep;2(3):209-18.	
*	C86	GOFF et al., Efficient saturation mutagenesis of a pentapeptide coding sequence using mixed oligonucleotides. DNA. 1987 Aug;6(4):381-8.	
*	C87	GOLDENBERG et al., Dissecting the roles of individual interactions in protein stability: lessons from a circularized protein. J Cell Biochem. 1985;29(4):321-35.	
*	C88	GOLDENBERG et al., Kinetic analysis of the folding and unfolding of a mutant form of bovine pancreatic trypsin inhibitor lacking the cysteine-14 and -38 thiols. Biochemistry. 1988 Apr 5;27(7):2481-9.	
*	C89	GRAY et al., Peptide toxins from Conus geographus venom. J Biol Chem. 1981 May 25;256(10):4734-40.	
*	C90	GRAY et al., Conotoxin MI. Disulfide bonding and conformational states. J Biol Chem. 1983 Oct 25;258(20):12247-51.	
*	C91	GRAY et al., Conotoxin GI: disulfide bridges, synthesis, and preparation of iodinated derivatives. Biochemistry. 1984 Jun 5;23(12):2796-802.	
*	C92	GRAY et al., Peptide toxins from venomous Conus snails. Annu Rev Biochem. 1988;57:665-700.	
*	C93	GREENWOOD et al., Multiple display of foreign peptides on a filamentous bacteriophage. Peptides from Plasmodium falciparum circumsporozoite protein as antigens. J Mol Biol. 1991 Aug 20;220(4):821-7.	
*	C94	GRUBER et al., Light-directed combinatorial peptide synthesis. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p.489-91.	
*	C95	GUARINO et al., Citrobacter freundii produces an 18-amino-acid heat-stable enterotoxin identical to the 18-amino-acid Escherichia coli heat-stable enterotoxin (ST Ia). Infect Immun. 1989 Feb;57(2):649-52.	
*	C96	GUZMAN-VERDUZCO et al., Fusion of Escherichia coli heat-stable enterotoxin and heat-labile enterotoxin B subunit. J Bacteriol. 1987 Nov;169(11):5201-8.	
*	C97	GUZMAN-VERDUZCO et al., Rectification of two Escherichia coli heat-stable enterotoxin allele sequences and lack of biological effect of changing the carboxy-terminal tyrosine to histidine. Infect Immun. 1989 Feb;57(2):645-8.	
*	C98	GUZMAN-VERDUZCO et al., Export and processing analysis of a fusion between the extracellular heat-stable enterotoxin and the periplasmic B subunit of the heat-labile enterotoxin in Escherichia coli. Mol Microbiol. 1990 Feb;4(2):253-64.	
*	C99	HALL et al., Sequence information within the lamB genes in required for proper routing of the bacteriophage lambda receptor protein to the outer membrane of Escherichia coli K-12. J Mol Biol. 1982 Mar 25;156(1):93-112.	
*	C100	HARD et al., Solution structure of the glucocorticoid receptor DNA-binding domain. Science. 1990 Jul 13;249(4965):157-60.	
*	C101	HARKKI et al., Use of lambda vehicles to isolate ompC-lacZ gene fusions in Salmonella typhimurium LT2. Mol Gen Genet. 1987 Oct;209(3):607-11.	
*	C102	HASHIMOTO et al., Structure-activity relations of conotoxins at the neuromuscular junction. Eur J Pharmacol. 1985 Dec 3;118(3):351-4.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)			APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
			APPLICANT: Ladner et al.	
Sheet	9	of	21	GROUP ART UNIT: 1639 EXAMINER: Jeffrey S. Lundgren

*	C103	HATANAKA et al., Synthesis of mu-conotoxin GIIIA: a chemical probe for sodium channels. Chem Pharm Bull (Tokyo). 1990 Jan;38(1):236-8.	
*	C104	HECHT et al., Phage lambda repressor revertants. Amino acid substitutions that restore activity to mutant proteins. J Mol Biol. 1985 Nov 5;186(1):53-63.	
*	C105	HECHT et al., De novo design, expression, and characterization of Felix: a four-helix bundle protein of native-like sequence. Science. 1990 Aug 24;249(4971):884-91.	
*	C106	HEDEGAARD et al., Type 1 fimbriae of Escherichia coli as carriers of heterologous antigenic sequences. Gene. 1989 Dec 21;85(1):115-24.	
*	C107	HEINE et al., Genetic analysis of sequences in maltoporin that contribute to binding domains and pore structure. J Bacteriol. 1988 Apr;170(4):1730-8.	
*	C108	HEINE et al., Sequence determinants in the lamB gene of Escherichia coli influencing the binding and pore selectivity of maltoporin. Gene. 1987;53(2-3):287-92.	
*	C109	HEITZ et al., 1H 2D NMR and distance geometry study of the folding of Ecballium elaterium trypsin inhibitor, a member of the squash inhibitors family. Biochemistry. 1989 Mar 21;28(6):2392-8.	
*	C110	HIDER et al., A proposal for the structure of conotoxin--a potent antagonist of the nicotinic acetylcholine receptor. FEBS Lett. 1985 May 20;184(2):181-4.	
*	C111	HILLIARD et al., A molluscivorous Conus toxin: conserved frameworks in conotoxins. Biochemistry. 1989 Jan 10;28(1):358-61.	
*	C112	HO et al., Amino acid replacements that compensate for a large polypeptide deletion in an enzyme. Science. 1985 Jul 26;239(4711):389-93.	
*	C113	HOEGER et al., Cystein in peptide chemistry: side reactions associated with strategies for the handling of peptides containing cysteine. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p.576-7.	
*	C114	HOJIMA et al., Pumpkin seed inhibitor of human factor XIIa (activated Hageman factor) and bovine trypsin. Biochemistry. 1982 Aug 3;21(16):3741-6.	
*	C115	HOLAK et al., Determination of the complete three-dimensional structure of the trypsin inhibitor from squash seeds in aqueous solution by nuclear magnetic resonance and a combination of distance geometry and dynamical simulated annealing. J Mol Biol. 1989 Dec 5;210(3):635-48.	
*	C116	HOLAK et al., Nuclear magnetic resonance solution and X-ray structures of squash trypsin inhibitor exhibit the same conformation of the proteinase binding loop. J Mol Biol. 1989 Dec 5;210(3):649-54.	
*	C117	HOOGENBOOM et al., Multi-subunit proteins on the surface of filamentous phage: methodologies for displaying antibody (Fab) heavy and light chains. Nucleic Acids Res. 1991 Aug 11;19(15):4133-7.	
*	C118	HORVAT et al., Synthesis and acid ionization constants of cyclic cystine peptides H-Cys-(Gly) _n -Cys-OH (n = 0-4). Int J Pept Protein Res. 1989 Oct;34(4):346-51.	
*	C119	HORWITZ et al., Selection of new biological activities from random nucleotide sequences: evolutionary and practical considerations. Genome. 1989;31(1):112-7.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	10	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	C120	HOUGHTEN et al., Chemical synthesis of an octadecapeptide with the biological and immunological properties of human heat-stable Escherichia coli enterotoxin. Eur J Biochem. 1984 Nov 15;145(1):157-62.	
*	C121	HOUGHTEN et al., A completely synthetic toxoid vaccine containing Escherichia coli heat-stable toxin and antigenic determinants of the heat-labile toxin B subunit. Infect Immun. 1985 Jun;48(3):735-40.	
*	C122	HOUGHTEN et al., Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery. Nature. 1991 Nov 7;354(6348):84-6.	
*	C123	HUBER et al., Interaction of divalent cations with beta-galactosidase (Escherichia coli). Biochemistry. 1979 Sep 18;18(19):4090-5.	
*	C124	HUBNER et al., Random mutagenesis using degenerate oligodeoxyribonucleotides. Gene. 1988 Dec 20;73(2):319-25.	
*	C125	HUSE et al., Generation of a large combinatorial library of the immunoglobulin repertoire in phage lambda. Science. 1989 Dec 8;246(4935):1275-81.	
*	C126	IIJIMA et al., Molecular cloning of Thermus flavus malate dehydrogenase gene. Agric Biol Chem. 1986 Mar;50(3):589-92. Japan. (Listed as Fijima et al. in parent IDS)	
*	C127	IL'ICHEV et al., [Production of a viable variant of the M13 phage with a foreign peptide inserted into the basic coat protein] Dokl Akad Nauk SSSR. 1989;307(2):481-3. Russian.	
*	C128	IVERSON et al., Sequence-specific peptide cleavage catalyzed by an antibody. Science. 1989 Mar 3;243(4895):1184-8.	
*	C129	JANATOVA et al., Disulfide bonds are localized within the short consensus repeat units of complement regulatory proteins: C4b-binding protein. Biochemistry. 1989 May 30;28(11):4754-61.	
*	C130	JANIN et al., Domains in proteins: definitions, location, and structural principles. Methods Enzymol. 1985;115:420-30.	
*	C131	JENNINGS et al., Fimbriae of Bacteroides nodosus: protein engineering of the structural subunit for the production of an exogenous peptide. Protein Eng. 1989 Jan;2(5):365-9.	
*	C132	JOUBERT et al., Trypsin iso-inhibitors from Momordica repens seeds. Phytochemistry. 1984;23:1401-6.	
*	C133	JUDD et al., Structure and surface exposure of protein IIIs of Neisseria gonorrhoeae JS3. Infect Immun. 1985 May;48(2):452-7.	
*	C134	JUDD et al., Evidence for N-terminal exposure of the protein IA subclass of Neisseria gonorrhoeae protein I. Infect Immun. 1986 Nov;54(2):408-14.	
*	C135	KABSCH et al., On the use of sequence homologies to predict protein structure: identical pentapeptides can have completely different conformations. Proc Natl Acad Sci U S A. 1984 Feb;81(4):1075-8.	
*	C136	KAGERMEIER et al., Identification and preliminary characterization of a lectinlike protein from Capnocytophaga gingivalis (emended). Infect Immun. 1986 Feb;51(2):490-4.	
*	C137	KAISER et al., Many random sequences functionally replace the secretion signal sequence of yeast invertase. Science. 1987 Jan 16;235(4786):312-7.	
*	C138	KANG et al., Linkage of recognition and replication functions by assembling combinatorial antibody Fab libraries along phage surfaces. Proc Natl Acad Sci U S A. 1991 May 15;88(10):4363-6.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	11	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	C139	KANG et al., Antibody redesign by chain shuffling from random combinatorial immunoglobulin libraries. Proc Natl Acad Sci U S A. 1991 Dec 15;88(24):11120-3.	
*	C140	KATZ et al., The crystallographically determined structures of atypical strained disulfides engineered into subtilisin. J Biol Chem. 1986 Nov 25;261(33):15480-5.	
*	C141	KATZ et al., Crystal structures of subtilisin BPN' variants containing disulfide bonds and cavities: concerted structural rearrangements induced by mutagenesis. Proteins. 1990;7(4):343-57.	
*	C142	KOBAYASHI et al., Solution conformation of conotoxin GI determined by 1H nuclear magnetic resonance spectroscopy and distance geometry calculations. Biochemistry. 1989 May 30;28(11):4853-60.	
*	C143	KOSTER et al., Deletions or duplications in the BtuB protein affect its level in the outer membrane of Escherichia coli. J Bacteriol. 1991 Sep;173(18):5639-47.	
*	C144	KUBOTA et al., A long-acting heat-stable enterotoxin analog of enterotoxigenic Escherichia coli with a single D-amino acid. Biochem Biophys Res Commun. 1989 May 30;161(1):229-35.	
*	C145	KUHN et al., Isolation of mutants in M13 coat protein that affect its synthesis, processing, and assembly into phage. J Biol Chem. 1985 Dec 15;260(29):15907-13.	
*	C146	KUKS et al., Xenopus laevis skin Arg-Xaa-Val-Arg-Gly-endoprotease. A highly specific protease cleaving after a single arginine of a consensus sequence of peptide hormone precursors. J Biol Chem. 1989 Sep 5;264(25):14609-12.	
*	C147	KUPERSZTOCH et al., Secretion of methanol-insoluble heat-stable enterotoxin (STB): energy- and secA-dependent conversion of pre-STB to an intermediate indistinguishable from the extracellular toxin. J Bacteriol. 1990 May;172(5):2427-32.	
*	C148	KURNIT et al., Improved genetic selection for screening bacteriophage libraries by homologous recombination in vivo. Proc Natl Acad Sci U S A. 1990 Apr;87(8):3166-9.	
*	C149	LAM et al., A new type of synthetic peptide library for identifying ligand-binding activity. Nature. 1991 Nov 7;354(6348):82-4.	
*	C150	LAM et al., The selectide process: rapid generation of large synthetic peptide libraries linked to identification and structure determination of acceptor-binding ligands. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 492-5.	
*	C151	LAMBERT et al., Solution synthesis of charybdotoxin (ChTX), a K+ channel blocker. Biochem Biophys Res Commun. 1990 Jul 31;170(2):684-90.	
*	C152	LAZURE et al., Primary structure determination of Escherichia coli heat-stable enterotoxin of porcine origin. Can J Biochem Cell Biol. 1983 May;61(5):287-92.	
*	C153	LEATHERBARROW et al., Design of a small peptide-based proteinase inhibitor by modeling the active-site region of barley chymotrypsin inhibitor 2. Biochemistry. 1991 Nov 5;30(44):10717-21.	
*	C154	LEATHERBARROW et al., Transition-state stabilization in the mechanism of tyrosyl-tRNA synthetase revealed by protein engineering. Proc Natl Acad Sci U S A. 1985 Dec;82(23):7840-4.	
*	C155	LECOMTE et al., Proton magnetic resonance characterization of phoratoxins and homologous proteins related to crambin. Biochemistry. 1987 Feb 24;26(4):1187-94.	
*	C156	LEE et al., Characterization of the gene encoding heat-stable toxin II and preliminary molecular epidemiological studies of enterotoxigenic Escherichia coli heat-stable toxin II producers. Infect Immun. 1983 Oct;42(1):264-8.	
*	C157	LEE et al., Cotranslational and posttranslational protein translocation in prokaryotic systems. Annu	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

[#] EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	12	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

		Rev Cell Biol. 1986;2:315-36.	
*	C158	LE-NGUYEN et al., Design and chemical synthesis of a 32 residues chimeric microprotein inhibiting both trypsin and carboxypeptidase A. Biochem Biophys Res Commun. 1989 Aug 15;162(3):1425-30.	
*	C159	LI et al., Viable transmembrane region mutants of bacteriophage M13 coat protein prepared by site-directed mutagenesis. Biochem Biophys Res Commun. 1991 Oct 31;180(2):687-93.	
*	C160	LOWMAN et al., Selecting high-affinity binding proteins by monovalent phage display. Biochemistry. 1991 Nov 12;30(45):10832-8.	
*	C161	MARKLAND et al., Design, construction and function of a multicopy display vector using fusions to the major coat protein of bacteriophage M13. Gene. 1991 Dec 20;109(1):13-9.	
*	C162	MARKS et al., Mutants of bovine pancreatic trypsin inhibitor lacking cysteines 14 and 38 can fold properly. Science. 1987 Mar 13;235(4794):1370-3.	
*	C163	MARKS et al., Production of native, correctly folded bovine pancreatic trypsin inhibitor by Escherichia coli. J Biol Chem. 1986 Jun 5;261(16):7115-8.	
*	C164	MARSHALL et al., Optimization of constraints forcing receptor-bound turn conformation of angiotensin. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 260-1.	
*	C165	MATSUMURA et al., Stabilization of phage T4 lysozyme by engineered disulfide bonds. Proc Natl Acad Sci U S A. 1989 Sep;86(17):6562-6.	
*	C166	McCAFFERTY et al., Phage antibodies: filamentous phage displaying antibody variable domains. Nature. 1990 Dec 6;348(6301):552-4.	
*	C167	McCAFFERTY et al., Phage-enzymes: expression and affinity chromatography of functional alkaline phosphatase on the surface of bacteriophage. Protein Eng. 1991;4(8):955-61.	
*	C168	McWHERTER et al., Novel inhibitors of human leukocyte elastase and cathepsin G. Sequence variants of squash seed protease inhibitor with altered protease selectivity. Biochemistry. 1989 Jul 11;28(14):5708-14.	
*	C169	MEDVED et al., Calorimetric investigation of the domain structure of human complement Cl-s: reversible unfolding of the short consensus repeat units. Biochemistry. 1989 Jun 27;28(13):5408-14.	
*	C170	MILTON et al., In vitro mutagenesis and overexpression of the Escherichia coli trpA gene and the partial characterization of the resultant tryptophan synthase mutant alpha-subunits. J Biol Chem. 1986 Dec 15;261(35):16604-15.	
*	C171	MOLLA et al., Antibodies against synthetic peptides and the topology of LamB, an outer membrane protein from Escherichia coli K12. Biochemistry. 1989 Oct 3;28(20):8234-41.	
*	C172	MORSE et al., A potential role for the major iron-regulated protein expressed by pathogenic Neisseria species. Rev Infect Dis. 1988 Jul-Aug;10 Suppl 2:S306-10.	
*	C173	MUNSON et al., Outer-membrane antigens of gram-negative pathogens: summary of session. Rev Infect Dis. 1988 Jul-Aug;10 Suppl 2:S317-8.	
*	C174	MURRAY et al., Random oligonucleotide mutagenesis: application to a large protein coding sequence of a major histocompatibility complex class I gene, H-2DP. Nucleic Acids Res. 1988 Oct 25;16(20):9761-73.	
*	C175	NAKAE et al., Outer-membrane permeability of bacteria. Crit Rev Microbiol. 1986;13(1):1-62.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	13	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

*	C176	NANO et al., Partial amino acid sequence and molecular cloning of the encoding gene for the major outer membrane protein of Chlamydia trachomatis. Infect Immun. 1985 May;48(2):372-7.	
*	C177	NELSON et al., Lambda repressor mutations that increase the affinity and specificity of operator binding. Cell. 1985 Sep;42(2):549-58.	
*	C178	NELSON et al., Interaction of mutant lambda repressors with operator and non-operator DNA. J Mol Biol. 1986 Nov 5;192(1):27-38.	
*	C179	NER et al., A simple and efficient procedure for generating random point mutations and for codon replacements using mixed oligodeoxynucleotides. DNA. 1988 Mar;7(2):127-34.	
*	C180	NEWLANDER et al., Design and synthesis of novel disulfide mimetics. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 763-5.	
*	C181	NIKAIKO et al., Amino acid sequence homology among the major outer membrane proteins of Escherichia coli. Proc Natl Acad Sci U S A. 1984 Feb;81(4):1048-52.	
*	C182	NIKAIKO et al., Molecular basis of bacterial outer membrane permeability. Microbiol Rev. 1985 Mar;49(1):1-32.	
*	C183	NISHIUCHI et al., Primary and secondary structure of conotoxin GI, a neurotoxic tridecapeptide from a marine snail. FEBS Lett. 1982 Nov 8;148(2):260-2.	
*	C184	NISHIUCHI et al., Synthesis and secondary-structure determination of omega-conotoxin GVIA: a 27-peptide with three intramolecular disulfide bonds. Biopolymers. 1986;25 Suppl:S61-8.	
*	C185	OKAMOTO et al., Substitutions of cysteine residues of Escherichia coli heat-stable enterotoxin by oligonucleotide-directed mutagenesis. Infect Immun. 1987 Sep;55(9):2121-5.	
*	C186	OKAMOTO et al., Reduction of enterotoxic activity of Escherichia coli heat-stable enterotoxin by substitution for an asparagine residue. Infect Immun. 1988 Aug;56(8):2144-8.	
*	C187	OKAMOTO et al., Synthesis of Escherichia coli heat-stable enterotoxin STp as a pre-pro form and role of the pro sequence in secretion. J Bacteriol. 1990 Sep;172(9):5260-5.	
*	C188	OLIPHANT et al., Cloning of random-sequence oligodeoxynucleotides. Gene. 1986;44(2-3):177-83.	
*	C189	OLIPHANT et al., The use of random-sequence oligonucleotides for determining consensus sequences. Methods Enzymol. 1987;155:568-82.	
*	C190	OLIVER et al., Protein secretion in Escherichia coli. Annu Rev Microbiol. 1985;39:615-48.	
*	C191	OLIVERA et al., Purification and sequence of a presynaptic peptide toxin from Conus geographus venom. Biochemistry. 1984 Oct 23;23(22):5087-90.	
*	C192	OLIVERA et al., Peptide neurotoxins from fish-hunting cone snails. Science. 1985 Dec 20;230(4732):1338-43.	
*	C193	OLIVERA et al., Neuronal calcium channel antagonists. Discrimination between calcium channel subtypes using omega-conotoxin from Conus magus venom. Biochemistry. 1987 Apr 21;26(8):2086-90.	
*	C194	OLIVERA et al., Diversity of Conus neuropeptides. Science. 1990 Jul 20;249(4966):257-63.	
*	C195	OLIVERA et al., Chapter 20: Conotoxins: targeted peptide ligands from snail venoms. in Marine Toxins. American Chemical Society, 1990.	
*	C196	OTLEWSKI et al., The serine proteinase inhibitor from summer squash (<i>Cucurbita pepo</i>): some structural features, stability and proteolytic degradation. Acta Biochim Pol. 1985;32(4):285-93.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)			APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
			APPLICANT: Ladner et al.	
Sheet	14	of	21	GROUP ART UNIT: 1639 EXAMINER: Jeffrey S. Lundgren

*	C197	PAKULA et al., Bacteriophage lambda cro mutations: effects on activity and intracellular degradation. Proc Natl Acad Sci U S A. 1986 Dec;83(23):8829-33.	
*	C198	PANTOLIANO et al., Protein engineering of subtilisin BPN': enhanced stabilization through the introduction of two cysteines to form a disulfide bond. Biochemistry. 1987 Apr 21;26(8):2077-82.	
*	C199	PARDI et al., Solution structures of alpha-conotoxin G1 determined by two-dimensional NMR spectroscopy. Biochemistry. 1989 Jun 27;28(13):5494-501.	
*	C200	PARMLEY et al., Antibody-selectable filamentous fd phage vectors: affinity purification of target genes. Gene. 1988 Dec 20;73(2):305-18.	
*	C201	PARRAGA et al., Zinc-dependent structure of a single-finger domain of yeast ADR1. Science. 1988 Sep 16;241(4872):1489-92.	
*	C202	PEASE et al., Folding and activity of hybrid sequence, disulfide-stabilized peptides. Proc Natl Acad Sci U S A. 1990 Aug;87(15):5643-7.	
*	C203	PERRY et al., Disulfide bond engineered into T4 lysozyme: stabilization of the protein toward thermal inactivation. Science. 1984 Nov 2;226(4674):555-7.	
*	C204	PERRY et al., Unpaired cysteine-54 interferes with the ability of an engineered disulfide to stabilize T4 lysozyme. Biochemistry. 1986 Feb 11;25(3):733-9.	
*	C205	RANDALL et al., Export of protein: a biochemical view. Annu Rev Microbiol. 1987;41:507-41.	
*	C206	RASHIN et al., Prediction of stabilities of thermolysin fragments. Biochemistry. 1984;23:5518.	
*	C207	REBAR et al., Phage display methods for selecting zinc finger proteins with novel DNA-binding specificities. Methods Enzymol. 1996;267:129-49.	
*	C208	REGNIER et al., The role of protein structure in chromatographic behavior. Science. 1987 Oct 16;238(4825):319-23.	
*	C209	REIDHAAR-OLSON et al., Combinatorial cassette mutagenesis as a probe of the informational content of protein sequences. Science. 1988 Jul 1;241(4861):53-7. (previously cited as "Olson et al.")	
*	C210	RIVIER et al., Neuronal calcium channel inhibitors. Synthesis of omega-conotoxin GVIA and effects on 45Ca uptake by synaptosomes. J Biol Chem. 1987 Jan 25;262(3):1194-8.	
*	C211	ROBERTS et al., The cloning and expression of an anti-peptide antibody: a system for rapid analysis of the binding properties of engineered antibodies. Protein Eng. 1986 Oct-Nov;1(1):59-65.	
*	C212	RONCO et al., Creation of targets for proteolytic cleavage in the LamB protein of E coli K12 by genetic insertion of foreign sequences: implications for topological studies. Biochimie. 1990 Feb-Mar;72(2-3):183-9.	
*	C213	ROSE et al., Automatic recognition of domains in globular proteins. Methods Enzymol. 1985;115:430-40.	
*	C214	RUHLMANN et al., Structure of the complex formed by bovine trypsin and bovine pancreatic trypsin inhibitor. Crystal structure determination and stereochemistry of the contact region. J Mol Biol. 1973 Jul 5;77(3):417-36.	
*	C215	SAEED et al., Characterization of heat-stable enterotoxin from a hypertoxicogenic Escherichia coli strain that is pathogenic for cattle. Infect Immun. 1986 Aug;53(2):445-7.	
*	C216	SANCHEZ et al., Genetic fusion of a non-toxic heat-stable enterotoxin-related decapeptide antigen to cholera toxin B-subunit. FEBS Lett. 1988 Dec 5;241(1-2):110-4.	
*	C217	SASTRY et al., Cloning of the immunological repertoire in Escherichia coli for generation of monoclonal catalytic antibodies: construction of a heavy chain variable region-specific cDNA	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

[#] EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	15	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

		library. Proc Natl Acad Sci U S A. 1989 Aug;86(15):5728-32.	
*	C218	SAUER et al., An engineered intersubunit disulfide enhances the stability and DNA binding of the N-terminal domain of lambda repressor. Biochemistry. 1986 Oct 7;25(20):5992-8.	
*	C219	SCHNELL et al., Prepeptide sequence of epidermin, a ribosomally synthesized antibiotic with four sulphide-rings. Nature. 1988 May 19;333(6170):276-8.	
*	C220	SCHWARZ et al., Stability studies on derivatives of the bovine pancreatic trypsin inhibitor. Biochemistry. 1987 Jun 16;26(12):3544-51.	
*	C221	SCOTT et al., Searching for peptide ligands with an epitope library. Science. 1990 Jul 27;249(4967):386-90.	
*	C222	SCOTT et al., Conotope phage libraries. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 595-6.	
*	C223	SHEN et al., Use of site-directed mutagenesis to define the limits of sequence variation tolerated for processing of the M13 procoat protein by the Escherichia coli leader peptidase. Biochemistry. 1991 Dec 24;30(51):11775-81.	
*	C224	SHIMONISHI et al., Mode of disulfide bond formation of a heat-stable enterotoxin (STh) produced by a human strain of enterotoxigenic Escherichia coli. FEBS Lett. 1987 May 4;215(1):165-70.	
*	C225	SIEKMANN et al., Immunological characterization of natural and semisynthetic aprotinin variants. Biol Chem Hoppe-Seyler. 1989;370:677-81.	
*	C226	SIKELA et al., Screening an expression library with a ligand probe: isolation and sequence of a cDNA corresponding to a brain calmodulin-binding protein. Proc Natl Acad Sci U S A. 1987 May;84(9):3038-42.	
*	C227	SILHavy et al., Uses of lac fusions for the study of biological problems. Microbiol Rev. 1985 Dec;49(4):398-418.	
*	C228	SILHavy et al., Use of gene fusions to study outer membrane protein localization in Escherichia coli. Proc Natl Acad Sci U S A. 1977 Dec;74(12):5411-5.	
*	C229	SINHA et al., Conversion of the Alzheimer's beta-amyloid precursor protein (APP) Kunitz domain into a potent human neutrophil elastase inhibitor. J Biol Chem. 1991 Nov 5;266(31):21011-3.	
*	C230	SMITH et al., Involvement of tryptophan 209 in the allosteric interactions of Escherichia coli aspartate transcarbamylase using single amino acid substitution mutants. J Mol Biol. 1986 May 5;189(1):227-38.	
*	C231	SMITH et al., Filamentous fusion phage: novel expression vectors that display cloned antigens on the virion surface. Science. 1985 Jun 14;238(4705):1315-7.	
*	C232	SMITH et al., Filamentous phage assembly: morphogenetically defective mutants that do not kill the host. Virology. 1988 Nov;167(1):156-65.	
*	C233	SMITH et al., Using an epitope library to identify peptide ligands for antibodies against folded epitopes. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 485-8.	
*	C234	SODERGREN et al., Selection for mutants altered in the expression or export of outer membrane porin OmpF. J Bacteriol. 1985 Jun;162(3):1047-53.	
*	C235	STRAUCH et al., An Escherichia coli mutation preventing degradation of abnormal periplasmic	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	16	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

		proteins. Proc Natl Acad Sci U S A. 1988 Mar;85(5):1576-80.	
*	C236	STRALEY et al., The plasmid-encoded outer-membrane proteins of <i>Yersinia pestis</i> . Rev Infect Dis. 1988 Jul-Aug;10 Suppl 2:S323-6.	
*	C237	STULL et al., Characterization of <i>Haemophilus influenzae</i> type b fimbriae. Infect Immun. 1984 Dec;46(3):787-96.	
*	C238	SUN et al., Effects of synthetic omega-conotoxin GVIA (omega-CgTX GVIA) on the membrane calcium current of an identifiable giant neurone, d-RPLN, of an African giant snail (<i>Achatina fulica</i> Ferussac), measured under the voltage clamp condition. Comp Biochem Physiol C. 1987;87(2):363-6.	
*	C239	SUTCLIFFE et al., Knowledge based modelling of homologous proteins, Part I: Three-dimensional frameworks derived from the simultaneous superposition of multiple structures. Protein Eng. 1987 Oct-Nov;1(5):377-84.	
*	C240	SUTCLIFFE et al., Knowledge based modelling of homologous proteins, Part II: Rules for the conformations of substituted sidechains. Protein Eng. 1987 Oct-Nov;1(5):385-92.	
*	C241	SVENDSEN et al., Amino acid sequence of serine protease inhibitor CI-1 from barley. Homology with barley inhibitor CI-2, potato inhibitor I, and leech elgin. Carlsberg Res Comm. 1982;47:45-53.	
*	C242	TAKEDA et al., Production of a monoclonal antibody to <i>Vibrio cholerae</i> non-O1 heat-stable enterotoxin (ST) which is cross-reactive with <i>Yersinia enterocolitica</i> ST. Infect Immun. 1990 Sep;58(9):2755-9.	
*	C243	TAM et al., A highly selective and effective reagent for disulfide bond formation in peptide synthesis and protein folding. in Smith et al., eds. Peptides: Chemistry & Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 June 16-21; Cambridge, Massachusetts, USA (ESCOM, Leiden: 1992). p. 499-501.	
*	C244	TAN et al., Synthesis and characterization of a pancreatic trypsin inhibitor homologue and a model inhibitor. Biochemistry. 1977 Apr 19;16(8):1531-41.	
*	C245	THOMPSON et al., Biological and immunological characteristics of 125I-4Tyr and -18Tyr <i>Escherichia coli</i> heat-stable enterotoxin species purified by high-performance liquid chromatography. Anal Biochem. 1985 Jul;148(1):26-36.	
*	C246	THOMPSON et al., Revised amino acid sequence for a heat-stable enterotoxin produced by an <i>Escherichia coli</i> strain (18D) that is pathogenic for humans. Infect Immun. 1985 Mar;47(3):834-6.	
*	C247	TOMMASSEN et al., Subcellular localization of a PhoE-LacZ fusion protein in <i>E. coli</i> by protease accessibility experiments reveals an inner-membrane-spanning form of the protein. FEBS Lett. 1987 Sep 14;221(2):226-30.	
*	C248	TONILOLO et al., Structure of conformationally constrained peptides: from model compounds to bioactive peptides. Biopolymers. 1989 Jan;28(1):247-57.	
*	C249	TSUNETSUGU-YOKOTA et al., Expression of an immunogenic region of HIV by a filamentous bacteriophage vector. Gene. 1991 Mar 15;99(2):261-5.	
*	C250	VALENZUELA et al., Antigen engineering in yeast: Synthesis and assembly of hybrid hepatitis B surface antigen-herpes simplex 1 gD particles. Bio/Technology. 1985 Apr;3:323-6.	
*	C251	VEBER et al., Design and discovery in the development of peptide analogs. Peptides, Chemistry & Biology. 1991;3-14.	
*	C252	VERSHON et al., Mutagenesis of the Arc Repressor Using Synthetic Primers with Random Substitutions. In: Protein Engineering: Applications in Sciences, Medicine, and Industry. (M.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	17	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

		Inouye & R. Sarma, eds.) pp. 243-256.	
*	C253	VERSHON et al., Isolation and analysis of arc repressor mutants: evidence for an unusual mechanism of DNA binding. <i>Proteins</i> . 1986 Dec;1(4):302-11.	
*	C254	VON HEIJNE et al., Membrane proteins: from sequence to structure. <i>Protein Eng.</i> 1990 Dec;4(2):109-12. (Previously cited as "Heijne et al.")	
*	C255	WAGNER et al., The influence of localized chemical modifications of the basic pancreatic trypsin inhibitor on static and dynamic aspects of the molecular conformation in solution. <i>Eur J Biochem.</i> 1979 Apr 2;95(2):239-48.	
*	C256	WANG et al., A vector that expresses secreted proteins on the cell surface. <i>DNA</i> . 1989 Dec;8(10):753-8.	
*	C257	WELLS et al., In vivo formation and stability of engineered disulfide bonds in subtilisin. <i>J Biol Chem.</i> 1986 May 15;261(14):6564-70.	
*	C258	WELLS et al., Recruitment of substrate-specificity properties from one enzyme into a related one by protein engineering. <i>Proc Natl Acad Sci U S A.</i> 1987 Aug;84(15):5167-71.	
*	C259	WETZEL et al., What is protein engineering? <i>Protein Eng.</i> 1986 Oct-Nov;1(1):3-5.	
*	C260	WETZEL et al., Learning from the immune system: laboratory methods for creating and refining molecular diversity in polypeptides. <i>Protein Eng.</i> 1991 Apr;4(4):371-4.	
*	C261	WIECZOREK et al., The squash family of serine proteinase inhibitors. Amino acid sequences and association equilibrium constants of inhibitors from squash, summer squash, zucchini, and cucumber seeds. <i>Biochem Biophys Res Commun.</i> 1985 Jan 31;126(2):646-52.	
*	C262	WILKINSON et al., A large increase in enzyme-substrate affinity by protein engineering. <i>Nature</i> . 1984 Jan 12-18;307(5947):187-8.	
*	C263	WILLIAMS et al., Design of bioactive peptides based on antibody hypervariable region structures. Development of conformationally constrained and dimeric peptides with enhanced affinity. <i>J Biol Chem.</i> 1991 Mar 15;266(8):5182-90.	
*	C264	WOLF-WATZ et al., Transfer of the virulence plasmid of <i>Yersinia pestis</i> to <i>Yersinia pseudotuberculosis</i> . <i>Infect Immun.</i> 1985 Apr;48(1):241-3.	
*	C265	WOODWARD et al., Constant and hypervariable regions in conotoxin propeptides. <i>EMBO J.</i> 1990 Apr;9(4):1015-20.	
*	C266	WU et al., Expression of immunogenic epitopes of hepatitis B surface antigen with hybrid flagellin proteins by a vaccine strain of <i>Salmonella</i> . <i>Proc Natl Acad Sci U S A.</i> 1989 Jun;86(12):4726-30.	
*	C267	YANAGAWA et al., A novel sodium channel inhibitor from <i>Conus geographus</i> : purification, structure, and pharmacological properties. <i>Biochemistry</i> . 1988 Aug 23;27(17):6256-62.	
*	C268	YOSHIMURA et al., Essential structure for full enterotoxigenic activity of heat-stable enterotoxin produced by enterotoxigenic <i>Escherichia coli</i> . <i>FEBS Lett.</i> 1985 Feb 11;181(1):138-42.	
*	C269	ZAFARALLA et al., Phylogenetic specificity of cholinergic ligands: alpha-conotoxin SI. <i>Biochemistry</i> . 1988 Sep 6;27(18):7102-5.	
*	C270	ZHANG et al., Factors governing selective formation of specific disulfides in synthetic variants of alpha-conotoxin. <i>Biochemistry</i> . 1991 Nov 26;30(47):11343-8.	
	C271	[No Author Listed] Webster's Third New International Dictionary of the English Language, Unabridged. Gove et al., eds. p209.	
	C272	ADAMS et al., Molecular cloning of mouse immunoglobulin heavy chain messenger ribonucleic acids coding for mu, alpha, gamma 1, gamma 2a, and gamma 3 chains. <i>Biochemistry</i> . 1980 Jun	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	18	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

		10;19(12):2711-9.	
	C273	ALVES et al., Changing the hydrogen-bonding potential in the DNA binding site of EcoRI by site-directed mutagenesis drastically reduces the enzymatic activity, not, however, the preference of this restriction endonuclease for cleavage within the site-GAATTC-. Biochemistry. 1989 Mar 21;28(6):2678-84.	
	C274	AMERY et al., Identification of a novel human peroxisomal 2,4-dienoyl-CoA reductase related protein using the M13 phage protein VI phage display technology. Comb Chem High Throughput Screen. 2001 Nov;4(7):545-52.	
	C275	AMSTER et al., Synthesis of part of a mouse immunoglobulin light chain in a bacterial clone. Nucleic Acids Res. 1980 May 10;8(9):2055-65.	
	C276	BARBAS et al., Semisynthetic combinatorial antibody libraries: a chemical solution to the diversity problem. Proc Natl Acad Sci U S A. 1992 May 15;89(10):4457-61.	
	C277	BARBAS et al., Human monoclonal Fab fragments derived from a combinatorial library bind to respiratory syncytial virus F glycoprotein and neutralize infectivity. Proc Natl Acad Sci U S A. 1992 Nov 1;89(21):10164-8.	
	C278	BODE et al., The refined 2.0 Å X-ray crystal structure of the complex formed between bovine beta-trypsin and CMTI-I, a trypsin inhibitor from squash seeds (<i>Cucurbita maxima</i>). Topological similarity of the squash seed inhibitors with the carboxypeptidase A inhibitor from potatoes. FEBS Lett. 1989 Jan 2;242(2):285-92.	
	C279	BUNIKIS et al., Access of antibody or trypsin to an integral outer membrane protein (P66) of <i>Borrelia burgdorferi</i> is hindered by Osp lipoproteins. Infect Immun. 1999 Jun;67(6):2874-83.	
	C280	COREY et al., Trypsin display on the surface of bacteriophage. Gene. 1993 Jun 15;128(1):129-34.	
	C281	Decision of the Technical Board of Appeal 3.3.4 of July 2, 2002; case number T 0792/00 – 3.3.4.	
	C282	DILLNER et al., Antibodies against synthetic peptides react with the second Epstein-Barr virus-associated nuclear antigen. EMBO J. 1985 Jul;4(7):1813-8.	
	C283	DOLBY et al., Cloning and partial nucleotide sequence of human immunoglobulin mu chain cDNA from B cells and mouse-human hybridomas. Proc Natl Acad Sci U S A. 1980 Oct;77(10):6027-31.	
	C284	FELICI et al., Mimicking of discontinuous epitopes by phage-displayed peptides, II. Selection of clones recognized by a protective monoclonal antibody against the <i>Bordetella pertussis</i> toxin from phage peptide libraries. Gene. 1993 Jun 15;128(1):21-7.	
	C285	GAO et al., Making artificial antibodies: a format for phage display of combinatorial heterodimeric arrays. Proc Natl Acad Sci U S A. 1999 May 25;96(11):6025-30.	
	C286	GEIGER et al., Genetic engineering of EcoRI mutants with altered amino acid residues in the DNA binding site: physicochemical investigations give evidence for an altered monomer/dimer equilibrium for the Gln144Lys145 and Gln144Lys145Lys200 mutants. Biochemistry. 1989 Mar 21;28(6):2667-77.	
	C287	GELTOSKY et al., Use of a synthetic peptide-based ELISA for the diagnosis of infectious mononucleosis and other diseases. J Clin Lab Anal. 1987;1:153-62.	
	C288	GEYSEN et al., Strategies for epitope analysis using peptide synthesis. J Immunol Methods. 1987 Sep 24;102(2):259-74.	
	C289	GEYSEN et al., Use of peptide synthesis to probe viral antigens for epitopes to a resolution of a single amino acid. Proc Natl Acad Sci U S A. 1984 Jul;81(13):3998-4002.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	19	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

C290	GEYSEN et al., Small peptides induce antibodies with a sequence and structural requirement for binding antigen comparable to antibodies raised against the native protein. Proc Natl Acad Sci U S A. 1985 Jan;82(1):178-82.	
C291	GEYSEN et al., Chemistry of antibody binding to a protein. Science. 1987 Mar 6;235(4793):1184-90.	
C292	GIEBEL et al., Screening of cyclic peptide phage libraries identifies ligands that bind streptavidin with high affinities. Biochemistry. 1995 Nov 28;34(47):15430-5.	
C293	GLASER et al., Antibody engineering by codon-based mutagenesis in a filamentous phage vector system. J Immunol. 1992 Dec 15;149(12):3903-13.	
C294	GOUGH et al., Molecular cloning of seven mouse immunoglobulin kappa chain messenger ribonucleic acids. Biochemistry. 1980 Jun 10;19(12):2702-10.	
C295	GRAM et al., In vitro selection and affinity maturation of antibodies from a naive combinatorial immunoglobulin library. Proc Natl Acad Sci U S A. 1992 Apr 15;89(8):3576-80.	
C296	GREEN et al., Immunogenic structure of the influenza virus hemagglutinin. Cell. 1982 Mar;28(3):477-87.	
C297	HAWKINS et al., Selection of phage antibodies by binding affinity. Mimicking affinity maturation. J Mol Biol. 1992 Aug 5;226(3):889-96.	
C298	HOCHSTRASSER et al., Kunitz-type proteinase inhibitors derived by limited proteolysis of the inter-alpha-trypsin inhibitor, VII. Determination of the amino-acid sequence of the trypsin-released inhibitor from bovine inter-alpha-trypsin inhibitor. Hoppe Seylers Z Physiol Chem. 1983 Dec;364(12):1679-87.	
C299	HOOGENBOOM et al., Building antibodies from their genes. Immunol Rev. 1992 Dec;130:41-68.	
C300	HOZUMI et al., Characterization of a mouse DNA clone containing an immunoglobulin variable region gene. Nucleic Acids Res. 1978 Jun;5(6):1779-99.	
C301	HUFTON et al., Phage display of cDNA repertoires: the pVI display system and its applications for the selection of immunogenic ligands. J Immunol Methods. 1999 Dec 10;231(1-2):39-51.	
C302	HUSE et al., Application of a filamentous phage pVIII fusion protein system suitable for efficient production, screening, and mutagenesis of F(ab) antibody fragments. J Immunol. 1992 Dec 15;149(12):3914-20.	
C303	JESPERS et al., Surface expression and ligand-based selection of cDNAs fused to filamentous phage gene VI. Biotechnology (N Y). 1995 Apr;13(4):378-82.	
C304	KIM et al., Refinement of Eco RI endonuclease crystal structure: a revised protein chain tracing. Science. 1990 Sep 14;249(4974):1307-9.	
C305	LE-NGUYEN et al., Solid phase synthesis of a trypsin inhibitor isolated from the Cucurbitaceae Ecballium elaterium. Int J Pept Protein Res. 1989 Dec;34(6):492-7.	
C306	LERNER et al., Antibodies of predetermined specificity in biology and medicine. Adv Immunol. 1984;36:1-44.	
C307	MARKS et al., By-passing immunization: building high affinity human antibodies by chain shuffling. Biotechnology (N Y). 1992 Jul;10(7):779-83.	
C308	MATTHEWS et al., Substrate phage: selection of protease substrates by monovalent phage display. Science. 1993 May 21;260(5111):1113-7.	
C309	McCLAIN et al., in Peptides: Chemistry and Biology, Proceedings of the Twelfth American Peptide Symposium. 1991 Jun 16-21; Cambridge, MA. Smith et al., eds. p364-5.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	20	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

C310	MECHIN et al., Identification of surface-exposed linear B-cell epitopes of the nonfimbrial adhesin CS31A of Escherichia coli by using overlapping peptides and antipeptide antibodies. Infect Immun. 1996 Sep;64(9):3555-64.	
C311	MESSING et al., A new pair of M13 vectors for selecting either DNA strand of double-digest restriction fragments. Gene. 1982 Oct;19(3):269-76.	
C312	MESSING et al., Filamentous coliphage M13 as a cloning vehicle: insertion of a HindII fragment of the lac regulatory region in M13 replicative form in vitro. Proc Natl Acad Sci U S A. 1977 Sep;74(9):3642-6.	
C313	MIDDELDORP et al., Epitope-mapping on the Epstein-Barr virus major capsid protein using systematic synthesis of overlapping oligopeptides. J Virol Methods. 1988 Sep;21(1-4):147-59.	
C314	MUSACCHIO et al., Crystal structure of a Src-homology 3 (SH3) domain. Nature. 1992 Oct 29;359(6398):851-5.	
C315	NAGAI et al., Generation of beta-globin by sequence-specific proteolysis of a hybrid protein produced in Escherichia coli. Nature. 1984 Jun 28-Jul 4;309(5971):810-2.	
C316	OELGESCHLAGER et al., Probing the function of individual amino acid residues in the DNA binding site of the EcoRI restriction endonuclease by analysing the toxicity of genetically engineered mutants. Gene. 1990 Apr 30;89(1):19-27.	
C317	OTLEWSKI et al., Amino-acid sequences of trypsin inhibitors from watermelon (<i>Citrullus vulgaris</i>) and red bryony (<i>Bryonia dioica</i>) seeds. Biol Chem Hoppe Seyler. 1987 Nov;368(11):1505-7.	
C318	PAGES et al., Immunological evidence for differences in the exposed regions of OmpF porins from Escherichia coli B and K-12. Mol Immunol. 1988 Jun;25(6):555-63.	
C319	PANNEKOEK et al., Functional display of human plasminogen-activator inhibitor 1 (PAI-1) on phages: novel perspectives for structure-function analysis by error-prone DNA synthesis. Gene. 1993 Jun 15;128(1):135-40.	
C320	QUEEN et al., A humanized antibody that binds to the interleukin 2 receptor. Proc Natl Acad Sci U S A. 1989 Dec;86(24):10029-33.	
C321	RICE et al., Regulated expression of an immunoglobulin kappa gene introduced into a mouse lymphoid cell line. Proc Natl Acad Sci U S A. 1982 Dec;79(24):7862-5.	
C322	SCHOLTISSEK et al., Polypeptide sequences involved in the cleavage of DNA by the restriction endonuclease EcoRI. J Biol Chem. 1986 Feb 15;261(5):2228-34.	
C323	SIOUD et al., Profiling the immune response in patients with breast cancer by phage-displayed cDNA libraries. Eur J Immunol. 2001 Mar;31(3):716-25.	
C324	SOHOEL et al., Peptide mapping and amino acid sequence analysis of the 40 kDa outer membrane protein of <i>Fusobacterium nucleatum</i> . Adv Exp Med Biol. 1995;371B:1137-40.	
C325	SOMERS et al., A panel of candidate tumor antigens in colorectal cancer revealed by the serological selection of a phage displayed cDNA expression library. J Immunol. 2002 Sep 1;169(5):2772-80.	
C326	SRIKUMAR et al., Antigenic sites on porin of <i>Haemophilus influenzae</i> type b: mapping with synthetic peptides and evaluation of structure predictions. J Bacteriol. 1992 Jun;174(12):4007-16.	
C327	SU et al., Differential effect of trypsin on infectivity of <i>Chlamydia trachomatis</i> : loss of infectivity requires cleavage of major outer membrane protein variable domains II and IV. Infect Immun. 1988 Aug;56(8):2094-100.	
C328	SWIMMER et al., Phage display of ricin B chain and its single binding domains: system for screening galactose-binding mutants. Proc Natl Acad Sci U S A. 1992 May 1;89(9):3756-60.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08)				APPLICATION NO.: 09/893,878	ATTY. DOCKET NO.: D0617.70002US10
				FILING DATE: June 29, 2001	CONFIRMATION NO.: 1764
				APPLICANT: Ladner et al.	
Sheet	21	of	21	GROUP ART UNIT: 1639	EXAMINER: Jeffrey S. Lundgren

	C329	VIAENE et al., Identification of a collagen-binding protein from Necator americanus by using a cDNA-expression phage display library. J Parasitol. 2001 Jun;87(3):619-25.	
	C330	VIEIRA et al., The pUC plasmids, an M13mp7-derived system for insertion mutagenesis and sequencing with synthetic universal primers. Gene. 1982 Oct;19(3):259-68.	
	C331	WANG et al., The Structure of Immunoglobins. Chapter 2 in Basic & Clinical Immunology. Fudenberg et al., eds. 1976:15-21.	
	C332	WUNG et al., Corrigendum to "Selection of phage-displayed superantigen by binding to cell-surface MHC class II". J Immunol Methods. 1997 Dec 29;210(2):251.	
	C333	ZEBEDEE et al., Human combinatorial antibody libraries to hepatitis B surface antigen. Proc Natl Acad Sci U S A. 1992 Apr 15;89(8):3175-9.	

*a copy of this reference is not provided as it was previously cited in the IDS filed April 22, 2002 and/or was cited by or submitted to the office in a prior application, Serial No. 08/415,922, filed April 3, 1995; Serial No. 08/993,776, filed December 18, 1997; and/or Serial No. 07/664,989, filed March 1, 1991; and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]

EXAMINER:	DATE CONSIDERED:
-----------	------------------

[#] EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.